Method for Optimal Driver Selection

Adi Srinivasan

5   ABSTRACT OF THE DISCLOSURE

A method for optimal driver selection uses a cost function that is based on the non-linear delay characteristics and the stage gain of the candidate drivers. The cost function operates to select an optimal driver for

10   driving the predetermined capacitive load which simultaneously minimizes the delay and the amount of input capacitance introduced. In one embodiment, a method for selecting a driver for driving a load capacitance from a group of drivers includes: computing for each driver a cost

15   based on a cost function associated with the driver, and selecting the driver having the smallest cost. The cost function is directly proportional to a delay of the driver and inversely proportional to the logarithm of a stage gain of the driver. In another embodiment, the stage gain is an

20   output capacitance driven by the driver (the load capacitance) divided by an input capacitance of the driver.